

## A stabilized tunable dual wavelength erbium-doped fiber laser with equal output power

### ABSTRACT

Tunable dual-wavelength erbium-doped fiber laser with good stability is experimentally demonstrated. Output power of as high as +5.26 dBm is obtained in dual ring configuration. Both laser output can be tuned to as closed as 0.8 nm spacing between each other, with tuning range of 31.33 nm. The stability of both outputs was tested that results in less than  $\pm 0.8$  dB and  $\pm 0.01$  nm in power and wavelength fluctuation, respectively.

**Keyword:** Dual-ring; Dual-wavelength; Erbium doped fiber laser; Good stability; Laser output; Output power; Tuning ranges; Wavelength fluctuations